COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET
FILE NOS. DWM-31434-042 (includes DWM-00062, DWM-02162 and DWM-02163) DAQ-31740-030 and DOW-26141-042

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET

PETITIONER

VS. **AGREED ORDER**

UNITED STATES DEPARTMENT OF ENERGY RESPONDENT

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I. STATEMENT OF FACTS

1. The Natural Resources and Environmental Protection Cabinet (hereinafter the "Cabinet") is charged with the statutory duty of enforcing the statutes and administrative regulations of the Commonwealth of Kentucky relating to waste management as provided for under Kentucky Revised Statutes (KRS) Chapter 224 and the regulations promulgated thereunder.

2. The Respondent is the United States Department of Energy (hereinafter "DOE"). DOE is the owner of the Paducah Gaseous Diffusion Plant (hereinafter "PGDP"), a uranium enrichment facility, located near Paducah, Kentucky in McCracken County. PGDP is a "facility" as that term is defined in 401 KAR 32:005, Section 1(93); 401 KAR 34:005, Section 1(93); and 401 KAR 38:005, Section 1(93).

3. DOE is registered as a large-quantity hazardous-waste generator with EPA ID No. KY8 890 008 982.

4. DOE is a "person" as that term is defined by KRS 224.01-010(17); 401 KAR 32:005, Section 1(203); 401 KAR 34:005, Section 1(203); and 401 KAR 38:005, Section 1(203); 401 KAR 50:010 Section 1(98); and 401 KAR 63:001 Section 1(88).

5. DOE is an "owner or operator" as that term is defined by 401 KAR 50:010, Section 1(94) and 401 KAR 63:001 Section 1(84).

6. PGDP was an "affected facility" as that term is defined by 401 KAR 63:010, Section 2(1).

7. DOE was operating "air pollution control equipment" as that term is defined by 401 KAR 50:010, Section 1(5) at PGDP.

8. In 1981, DOE was issued a solid waste disposal permit for the C-746-S facility. DOE operated the facility until 1995, when it was closed.

9. In the early 1980s, DOE was issued a solid waste disposal permit for the C-746-T facility. DOE operated the facility until 1992, when it was closed.

10. On July 16, 1991, the Cabinet issued a Hazardous Waste Permit for the PGDP for the operation of treatment and storage units and post-closure care for a disposal unit and for conducting corrective action at all Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) at the facility.

11. On September 10, 1995, the Secretary of the Cabinet entered a final Agreed Order to resolve DOE's violation of KRS 224.46-520 and 401 KAR 37:050 with respect to mixed waste. The Agreed Order incorporated an approved Site Treatment Plan (STP) which outlined schedules for the treatment of mixed waste stored in violation of KRS 224.46-520 and 401 KAR 37:050.

12. In 1996, DOE was issued a solid waste disposal permit for the C-746-U facility. DOE is currently operating this contained landfill.

13. On April 1, 1998, the Cabinet issued a Kentucky Pollution Discharge Elimination System (KPDES) permit to DOE.

14. In 1998, DOE, the Cabinet and U.S. Environmental Protection Agency (USEPA) entered into a Federal Facility Agreement (FFA) pursuant to 42 U.S.C.A Section 9620 that directs the comprehensive remediation of the PGDP.

15. In August 2003, DOE and the Commonwealth entered into a Letter of Intent (LOI), as set forth in Attachment A to this Agreed Order. The terms of the LOI, are incorporated into this section of the Agreed Order as if fully set forth herein.

A. ALLEGED LISTED HAZARDOUS WASTE VIOLATIONS

16. On May 3, 2002, DOE notified the Cabinet that certain drums of solid waste disposed of in Phases one (1) and two (2) of the C-746-U landfill may contain listed hazardous wastes (F001, F002, U228). Since that date, DOE has not placed any additional waste in those phases of the landfill.

17. On July 9, 2002, DOE notified the Cabinet that certain wastes disposed of in the C-746-S and C-746-T landfills may have been listed hazardous wastes (F001, F002, U228).

18. On November 13, 2002, the Cabinet issued Notices of Violation to DOE associated with the alleged disposal of listed hazardous waste in the C-746-S, C-746-T and C-746-U solid waste landfills. The following statutes and regulations were alleged as being violated: KRS 224.46-520(2) and 401 KAR 32:010(2); KRS 224.46-520(1) and

401 KAR 38:010(4); 401 KAR 47:040 3(3); 401 KAR 48:090, section 5. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to this matter.

19. On January 24, 2003, DOE notified the Cabinet that "an unknown, but potentially significant portion" of approximately 33,000 containers of waste currently being managed as low-level radioactive waste and/or Toxic Substances Control Act (hereinafter "TSCA") waste at the facility may contain listed hazardous wastes (F001, U228 and possibly F002). The potential listed wastes originated from trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) from historic operations at PGDP. DOE's notice also set forth an analysis and proposal of appropriate site-specific health-based levels for TCE and TCA in waste for the Cabinet's approval. The Cabinet will review and approve health-based levels which will be used to make "contained-in" determinations for various investigation and remediation waste streams at the PGDP.

20. DOE categorized the 33,000 containers of waste currently being managed as low-level radioactive waste and/or TSCA waste into high, medium, and low probability of containing suspect listed hazardous waste.

21. DOE completed a review of the 33,000 containers of waste, consisting of an iterative process knowledge and data review procedure. This review has determined that the containers identified in Attachment B to this Agreed Order are suspected to contain listed hazardous waste. These suspect wastes were identified because they (a) originated from areas known to be contaminated with TCE listed hazardous waste; (b) came from areas that were likely to have been contaminated with TCE listed hazardous

waste; or (c) were derived from handling any of the wastes described in subsection (a) or (b) of this paragraph.

22. The containers listed in Attachment B consist of containers of environmental media and debris. The containers of environmental media store soils, drill cuttings, sediments, groundwater, purge/well development water, and sample residuals. The debris containers store personal protective equipment (PPE), plastic, materials related to a monitoring well abandonment (grout, concrete, well casing and riser pipe), and other miscellaneous materials. Attachment B to this Agreed Order identifies which containers hold environmental media and which containers contain environmental debris.

23. All of the containers identified in Attachment B, currently are stored in areas that DOE has previously identified as SWMUs in its Part B Hazardous Waste Permit application. Attachment C sets forth a list of the SWMUs where such containers are stored.

24. Although the Cabinet has not yet issued a notice of violation with respect to DOE's January 24, 2003 submission, the Cabinet believes that there are statutory and regulatory violations and potential violations of KRS 224.46-510 and 401 KAR 32:010 (requirement to make a hazardous waste determination), KRS 224.46-520 and 401 KAR 38:010 (unpermitted storage of hazardous waste), 401 KAR 32:030 (pre-transport requirements), 401 KAR Chapter 37 (land disposal restrictions), 401 KAR 34:010-34:070 and 34:180, other provisions of KRS 224 Subchapter 46, other provisions of 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit with respect to these containers.

25. On or about April 9, 2003, DOE notified the Cabinet that it has transported containers of suspect listed hazardous wastes to certain off-site locations, as

non-hazardous waste. Although the Cabinet has not yet issued a notice of violation with respect to DOE's April 9, 2003, submission, the Cabinet believes that there are statutory and regulatory violations and potential violations of KRS 224.46-510 and 401 KAR 32:010 (requirement to make a hazardous waste determination), 401 KAR 32:030 (pre-transport requirements), other provisions of KRS 224 Subchapter 46, other provisions of 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit. The Cabinet also believes that such violations and potential violations also would exist if other incidents of transport of suspect listed waste (F001, F002, U228) containers to off-site locations are discovered.

B. ALLEGED DOE MATERIAL STORAGE AREA VIOLATIONS

26. The United States Enrichment Corporation ("USEC") has, since July 1, 1993, leased, and operated portions of the PGDP, subject to the lease provisions between DOE and USEC.

27. On or about December 31, 1996, the lease with USEC was modified deleting certain areas from those previously leased by USEC. DOE refers to the areas deleted from the USEC lease as DOE Material Storage Areas (DMSAs). As of December 7, 2000, DOE has identified approximately one hundred sixty (160) DMSAs.

28. On or about April 4, 2000, pursuant to 42 U.S.C.A. Section 6907, the USEPA issued a request for information to DOE with respect to the DMSAs.

29. On or about May 17, 2000, DOE submitted a response to EPA's request for information. Beginning on June 12, 2000, the Cabinet conducted a series of inspections of the DMSAs.

30. On September 5, 2000, the Cabinet issued a Notice of Violation (NOV) to DOE. The Cabinet alleged that DOE violated KRS 224.46-510 and 401 KAR 32:010 by failing to conduct a waste determination for wastes generated at the facility and managed in the DMSAs; violated Part IV. B. of the Hazardous Waste Permit and 401 KAR 34:060 by failing to notify the Cabinet of newly discovered SWMUs and AOCs; and violated KRS 224.46-520; 401KAR 38:010; 401 KAR 32:030, Section 5; and Part II of the permit with respect to hazardous and/or mixed wastes stored in the C-400-04 DMSA. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

31. On December 4, 2000, DOE submitted a Characterization/Remediation Plan for the DMSAs. The Cabinet reviewed the plan and provided comments.

32. On April 16, 2001, DOE submitted a revised DMSA Characterization/Remediation Plan.

33. Although the Cabinet had not approved the Plan, the Cabinet informed DOE that it would place no restriction on DOE's performance of characterization activities prior to approval of the Plan.

34. On July 31, 2001, the Cabinet issued a NOV to DOE alleging violations of KRS 224.46-520; 401 KAR 38:010; 401 KAR 32:030, Section 5; and Part II of the permit with respect to hazardous and/or mixed wastes stored in the C-331-10 DMSA. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

35. On October 9, 2001, the Cabinet issued a NOV to DOE alleging violations of KRS 224.46-520; 401 KAR 38:010; 401 KAR 32:030, Section 5; and Part II of the permit with respect to hazardous and/or mixed wastes stored in the C-335-05, C-331-15 and C-333-31 DMSAs. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

36. On January 18, 2002, the Cabinet issued a NOV to DOE. The Cabinet alleged that DOE violated KRS 224.46-510 and 401 KAR 32:010 by failing to conduct a waste determination for wastes generated at the facility and managed in SWMUs 206 (C-753-A), 464 (C-746-A) and 159 (C-746-H3 pad), and violated KRS 224.46-520; 401 KAR 38:010, Section 4; 401 KAR 32:030, Section 5; and Part II of the permit with respect to hazardous and/or mixed wastes stored in the following Solid Waste Management Units: 206 (C-753-A), 159 (C-746-H3 pad), 214 (DMSA OS-3), 216 (DMSA OS-5), 220 (DMSA OS-9), 222 (DMSA OS-11), 223 (DMSA OS-12), 249 (DMSA C-331-15), 287 (DMSA C-333-31), 351 (DMSA C-400-05), 354 (DMSA C-409-01), 355 (DMSA C-409-02) and 464 (C-746-A). The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

37. On or about February 28, 2002, the Cabinet issued a NOV to DOE. The Cabinet alleged that DOE violated KRS 224.46-510 and 401 KAR 32:010 by failing to conduct a waste determination for wastes generated at the facility and managed in SWMUs 248 (DMSA C-331-14), 287 (DMSA C-333-31), 351 (DMSA C-400-05) and 355 (DMSA C-409-02), and violated KRS 224.46-520; 401KAR 38:010, Section 4; 401

KAR 32:030, Section 5; and Part II of the permit with respect to hazardous and/or mixed wastes stored in the following SWMUs: 248 (DMSA C-331-14), 287 (DMSA C-333-31), 351 (DMSA C-400-05) and 355 (DMSA C-409-02). The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

38. On or about March 11, 2002, the Cabinet issued a NOV to DOE. The Cabinet alleged that DOE violated KRS 224.46-510 and 401 KAR 32:010 by failing to conduct a waste determination for wastes generated at the facility and managed in SWMUs 287 (DMSA C-333-31), and 355 (DMSA C-409-02), and violated KRS 224.46-520; 401 KAR 38:010, Section 4; 401 KAR 32:030, Section 5; and Part II of the permit with respect to hazardous and/or mixed wastes stored in the following SWMUs: 287 (DMSA C-333-31), and 355 (DMSA C-409-02). The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

39. On or about November 6, 2002, the Cabinet issued a NOV to DOE. The Cabinet alleged that DOE violated KRS 224.46-510 and 401 KAR 32:010 by failing to conduct a waste determination for wastes generated at the facility and managed in SWMUs 287 (DMSA C-333-31), 351 (DMSA C-400-05), 219 (DMSA OS-8), 277 (DMSA C-333-21), 276 (DMSA 333-20), 240 (DMSA C-331-06), 239 (DMSA 331-05), 231 (DMSA C-310-02), 250 (DMSA C-331-16) and 464 (C-746-A West End Smelter), and violated KRS 224.46-520; 401 KAR Chapter 32; 401 KAR Chapter 34; 401 KAR 38:010, Section 4; 401 KAR 32:030, Section 5; 401 KAR 38:030, Section 1; and Part II of the permit with respect to hazardous and/or mixed wastes stored in the following Solid

Waste Management Units: 287 (DMSA C-333-31), 351 (DMSA C-400-05), 219 (DMSA OS-8), 277 (DMSA C-333-21), 276 (DMSA C-333-20), 240 (DMSA C-331-06), 239 (DMSA C-331-05), 231 (DMSA C-310-02), 250 (DMSA C-331-16) and 464 (C-746-A West End Smelter). The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

40. As DOE has continued to characterize the DMSAs, the Cabinet alleges that additional violations of KRS 224 Subchapter 46 and 401 KAR Chapters 30-40 have been discovered. Further, as DOE continues to characterize the DMSAs, the Cabinet believes that additional violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit will be discovered in the DMSAs.

C. OTHER ALLEGED HAZARDOUS WASTE VIOLATIONS

41. On September 28, 1999, the Cabinet issued a NOV to DOE alleging violations of certain conditions of DOE's Hazardous Waste Permit (failure to report planned changes in SWMU 194). DOE completed the required remedial measures on or about October 1, 1999. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to this matter.

42. On January 14, 2000, the Cabinet issued a NOV to DOE alleging violation of DOE's Hazardous Waste Permit (failure to maintain systems of treatment and control and failure to take reasonable steps to minimize releases on the northern boundary of SWMUs 12, 14, and 15). DOE completed the required remedial measures on or about

March 21, 2000. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

43. On May 23, 2000, the Cabinet issued a NOV to DOE alleging violation for failing to analyze and sample groundwater from the C-404 landfill for all parameters required pursuant to the conditions of DOE's Hazardous Waste Permit. DOE completed the required remedial measures on or about July 7, 2000.

44. On August 8, 2000, the Cabinet issued a NOV alleging a violation of 401 KAR 34:180, Section 8 in the C-752-A storage facility. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to this matter.

45. On or about December 2001, through March 2002, DOE conducted sampling in Sections 1 and 2 of the North/South Diversion Ditch (SWMU No. 59) without notifying the Cabinet of the work in this SWMU. Although the Cabinet has not issued a Notice of Violation with respect to this failure, the Cabinet believes that DOE violated Condition III.E.10 of its Hazardous Waste Permit and that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and other provisions of DOE's Hazardous Waste Permit may have occurred with respect to this matter.

46. Beginning on May 6, 2002, the Cabinet conducted a series of inspections of DOE's hazardous waste facility.

47. On November 4, 2002, the Cabinet issued a NOV to DOE for various alleged violations of Kentucky's hazardous waste regulations observed during the May 2002 inspections. The following violations were alleged: 401 KAR 32:040, sections 1 and 2; 401 KAR 34:020, section 7; 401 KAR 37:010, section 7; 401 KAR 34:050, section 6; 401 KAR 32:030, section 5(1)(b); and 401 KAR 35:180, section 5. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to these matters.

48. On or about January 3, 2003, DOE began the C-415 waste sorting project. During the waste sorting, DOE discovered the presence of hazardous waste in some of the containers. Although the Cabinet has not issued a NOV, the Cabinet believes that there are statutory and regulatory violations and potential violations of KRS 224.46-510 and 401 KAR 32:010 (failure to make a waste determination); KRS 224.46-520 and 401 KAR 38:010 (unpermitted storage of hazardous waste); 401 KAR 32:030 (pre-transport requirements); 401 KAR Chapter 37 (land disposal restrictions); and 401 KAR 34:010-070 and 34:180; other provisions of KRS 224 Subchapter 46, other provisions of 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit with respect to this matter.

49. On or about March 5, 2003, DOE began the sorting and repackaging of 280 m^3 of PCB/Radioactive waste currently located at the C-753-A building. During the waste sorting and repackaging, DOE discovered the presence of hazardous waste in some of the containers. Although the Cabinet has not issued a NOV, the Cabinet believes that there are statutory and regulatory violations and potential violations of KRS 224.46-510 and 401 KAR 32:010 (failure to make a waste determination); KRS 224.46-520 and 401

KAR 38:010 (unpermitted storage of hazardous waste); 401 KAR 32:030 (pre-transport requirements); 401 KAR Chapter 37 (land disposal restrictions); 401 KAR 34:010-070 and 34:180; other provisions of KRS 224 Subchapter 46, other provisions of 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit with respect to this matter.

50. On or about February 28, 2003, DOE notified the Cabinet that it had failed to conduct the annual external inspection of storage tanks at C-733 for fiscal year 2002. Although the Cabinet has not issued a NOV with respect to this notification, the Cabinet believes that DOE violated or potentially violated 401 KAR 34:190, KRS 224 Subchapter 46, other provisions of 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit by failing to conduct this inspection.

51. On or about February 28, 2003, DOE notified the Cabinet that it had exceeded the ninety (90) day accumulation time for hazardous waste at the T-746-S-01 accumulation area by one (1) day. Although the Cabinet has not issued a NOV with respect to this notification, the Cabinet believes that DOE violated 401 KAR 32:030. The Cabinet also believes that other violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to this matter.

52. On March 4, 2003, the Cabinet notified DOE of the need to comply with Condition IV.B.3 (notification of new SWMUs) of its Hazardous Waste Permit with respect to the leachate transfer pipeline from the C-404 sump to the North/South Diversion Ditch. Although the Cabinet has not issued a NOV with respect to this issue, the Cabinet believes that DOE violated or potentially violated its Hazardous Waste

Permit, KRS 224 Subchapter 46, and 401 KAR Chapters 30-40 with respect to this matter.

53. On August 25, 2003, the Cabinet was notified that excavation in SWMU 84 had occurred without prior notice to the Cabinet. The event occurred when approved excavation work in SWMU 526 (to repair a water line) extended beyond that SWMU into SWMU 84. Although the Cabinet has not issued a NOV with respect to this failure, the Cabinet believes that DOE violated or potentially violated its Hazardous Waste Permit, KRS 224 Subchapter 46, and 401 KAR Chapters 30-40 with respect to this matter.

54. On or about July 30, 2001, the Cabinet issued a NOV to DOE alleging that DOE had failed to provide an abandonment and replacement workplan for C-404 landfill monitoring well MW-87. The Cabinet believes that violations and potential violations of KRS 224 Subchapter 46, 401 KAR Chapters 30-40, and DOE's Hazardous Waste Permit may have occurred with respect to this matter.

D. ALLEGED AIR QUALITY VIOLATIONS

55. The Cabinet conducted inspections at PGDP on August 7, 1997 and July 13, 2000.

56. On or about July 24, 2000, the Cabinet issued a NOV with an accompanying Inspection Report to DOE for allegedly violating KRS 224; 401 KAR 63:010 (for DOE's alleged failure to prevent particulate matter from becoming airborne); and 401 KAR 50:055, Section 2(5) (for DOE's alleged failure to maintain and operate air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions). An inspection on August 3, 2000, revealed that DOE had subsequently taken reasonable precautions to prevent the alleged fugitive

emissions reported in the July 13, 2000, Inspection Report. The Cabinet also believes that other violations and potential violations of KRS Subchapter 20, 401 KAR Chapters 50-63, and the applicable air permit may have occurred with respect to this matter.

57. During September 2003, the Cabinet conducted an in-office file review to determine DOE's compliance with the alleged requirement to submit an Annual Compliance Certification. The file review indicated that DOE allegedly has failed to submit a required Annual Compliance Certification for 2002. On September 11, 2003, the Cabinet issued a NOV alleging a violation of 401 KAR 52:020, Section 21. The Cabinet also believes that other violations and potential violations of KRS Subchapter 20, 401 KAR Chapters 50-63, and the applicable air permit may have occurred with respect to this matter.

58. On September 4, 2003, the Cabinet issued a letter to DOE alleging that a Site Inspection had found that certain recommended actions specified by the Kentucky Division Air Quality for the 6 Phase Project had not been met. Although the Cabinet has not issued a NOV with respect to this matter, the Cabinet also believes that violations and potential violations of KRS Subchapter 20, 401 KAR Chapters 50-63, and the applicable air permit may have occurred with respect to this matter.

E. ALLEGED WATER QUALITY VIOLATIONS

59. On or about March 17, 2003, the Cabinet issued a NOV to DOE for an alleged violation of 401 KAR 5:065 1(1) with respect to Outfall 001. The Cabinet also believes that other violations and potential violations of KRS Subchapter 70, 401 KAR Chapter 5, and the applicable water permit may have occurred with respect to this matter.

60. On March 20, 2003, DOE submitted a Toxicity Reduction Evaluation Plan in response to the NOV.

61. On or about November 23, 1999, the Cabinet issued a NOV to DOE for alleged permit violations of Whole Effluent Toxicity Limits at Outfall 001. The Cabinet also believes that other violations and potential violations of KRS Subchapter 70, 401 KAR Chapter 5, and the applicable water permit may have occurred with respect to this matter.

62. On or about February 28, 2001, the Cabinet issued a NOV to DOE for alleged failure to submit a Discharge Monitoring Report (DMR) for Outfall 017-X. The Cabinet believes that violations and potential violations of KRS Subchapter 70, 401 KAR Chapter 5, and the applicable water permit may have occurred with respect to this matter.

NOW THEREFORE, in the interest of settling all civil claims and controversies with respect to the above-referenced violations and potential violations addressed herein, the parties hereby consent to the entry of this Agreed Order and agree as follows:

II. REMEDIAL MEASURES

A. CONTAINED IN DETERMINATIONS AT THE PGDP

63. In the event that DOE intends to obtain a contained-in determination for environmental media or a determination that debris is no longer contaminated with listed hazardous waste, DOE and the Cabinet shall follow the protocols outlined in Attachment D. The specific requirements for characterization and sampling to support contained-in determinations will be approved by the Cabinet on a project-specific basis, consistent with Attachment D. The site-specific health-based levels for determining whether

contaminated media/debris still contains or is no longer contaminated with listed hazardous waste (TCE and 1,1,1 TCA) are as follows: TCE-39.2 ppm for solids and 1,1,1 TCA-2080 ppm for solids. The site-specific health-based levels for determining whether contaminated groundwater destined for on-site treatment and discharge through KPDES permitted outfalls (e.g., groundwater resulting from well-purging, well development, and well sampling) still contains listed hazardous waste (TCE and 1,1,1 TCA) are as follows: .081 ppm TCE. Groundwater that meets the health-based level for TCE shall also be deemed to no longer contain 1,1,1 TCA.

64. Solids that are determined to be below the levels set forth in paragraph 63 and that are not characteristically hazardous but that cannot be disposed in the C-746-U landfill shall be deemed to no longer contain or to no longer be contaminated with listed hazardous waste (F001, F002, U228) and may be managed in accordance with applicable low-level waste and TSCA requirements until dispositioned to an appropriate off-site facility. The Cabinet agrees to consult with DOE and the State where the off-site facility is located to reach agreement on the appropriate health-based standard for making contained-in determinations for wastes that are to be shipped to such facility. In making contained-in determinations pursuant to paragraph 63, the Cabinet is not making any determination regarding the nature or characteristic of the suspect listed waste at any time prior to the date of the contained-in determination.

B. CHARACTERIZATION OF DMSAs

65. As of the date of entry of this Agreed Order by the Secretary, the Cabinet has approved the Characterization/Sampling and Analysis Plan for the waste stored in the approximately one hundred sixty (160) DMSAs, as set forth in Attachment E.

66. DOE shall complete the enforceable requirements of the Characterization/Sampling and Analysis Plan as set forth in Attachment E according to the following schedule:

A. All Priority A DMSAs by **September 30, 2004.**

B. All Priority B DMSAs by **September 30, 2006.**

C. All Priority C DMSAs by **September 30, 2009.**

D. The C-400-05 DMSA by **September 30, 2004.**

The Priority A, Priority B, and Priority C DMSAs are identified in Attachment F. If any of the containers identified in Attachment B are located in Priority C DMSAs, DOE shall comply with the requirements of the Container Sampling and Analysis Plan, Attachment G with respect to such containers by September 30, 2007.

67. Within sixty (60) days of receipt of final validated data for entry into the OREIS database for each DMSA, DOE shall submit a characterization report (following the format of the model characterization report in Attachment H which outlines the work completed pursuant to the approved Characterization/Sampling and Analysis Plan. For purposes of this Agreed Order "final validated data" means data that has gone through validation/evaluation including independent evaluation of laboratory adherence to analytical method requirements; data quality checks; integration and evaluation of all information associated with a data result; evaluation of data authenticity, data integrity, data usability, outliers, and other precision, accuracy, representativeness, completeness, and comparability parameters. The Cabinet will review DOE's characterization report and either approve the report or issue a written Notice of Deficiency delineating the specific deficiencies and the changes that DOE needs to make to correct the identified

deficiencies. DOE shall respond to the deficiencies and resubmit the report within thirty (30) days of receipt of written notice from the Cabinet. The Cabinet will review the revised report and either approve the revised report or issue a second Notice of Deficiency. Upon receipt of the second Notice of Deficiency, DOE shall comply with the requirements in Paragraphs 118-126.

68. On an annual basis until January 1, 2010, DOE shall submit revisions to its Part A Hazardous Waste Permit to include identification of additional DMSAs identified as storing (for a period of time exceeding the limits set forth in 401 KAR 32:030) characteristic hazardous waste or listed hazardous waste in excess of contained-in levels without a permit during characterization of DMSAs. This paragraph shall not apply to waste identified as newly generated waste during implementation of the DMSA Characterization/Sampling and Analysis Plan. For the purposes of this Agreed Order, newly generated waste shall include fluids drained from equipment located in inside DMSAs.

69. On an annual basis until January 1, 2010, DOE shall submit revised SWMU Assessment Reports as required in its Hazardous Waste Permit for each of the DMSAs where DOE has identified newly discovered characteristic or listed waste above contained-in levels that has been stored without a permit in excess of the time limits set forth in 401 KAR 32:030.

70. Within twenty (20) days of receipt of final validated data for entry into the OREIS database, where such final data establishes the presence of any newly discovered characteristic hazardous waste or listed hazardous waste in excess of contained-in levels being stored in a DMSA in excess of the time limits set forth in 401 KAR 32:030 without

a hazardous waste permit, DOE shall properly label such wastes per 401 KAR 32:030 and 401 KAR 34:180 and move the wastes to RCRA compliant storage areas (e.g., permitted storage, Satellite Accumulation Areas) and provide notification to the Cabinet identifying the type of waste, the DMSA it had been stored in, and the date the hazardous or mixed waste was moved to RCRA compliant storage, and, where appropriate, the anticipated permitted storage location to which such waste will be sent. This notification shall supercede the 24 hour additional generator notification requirement outlined in the Cabinet's August 29, 2001 letter.

71. Based on final validated data that has been received for entry into the OREIS database, DOE shall include all newly discovered mixed waste in the annual update for the STP in accordance with the September 10, 1997 Agreed Order (File No. DWM-30039-042).

C. CHARACTERIZATION OF CONTAINERS THAT MAY CONTAIN LISTED HAZARDOUS WASTE

72. Within thirty (30) days of the entry of this Agreed Order by the Secretary, DOE shall begin implementation of the Container Management Plan set forth in Attachment I. Within one hundred twenty (120) days of the entry of this Agreed Order by the Secretary, DOE shall manage the containers identified in Attachment B that are being stored in unpermitted storage units in accordance with the Container Management Plan set forth in Attachment B. The requirements of this paragraph shall terminate with respect to (a) any container that holds hazardous waste, once the container has been moved to RCRA compliant storage (e.g., permitted storage, Satellite Accumulation Areas) or (b) any container that has been characterized pursuant to the Container

Sampling and Analysis Plan and determined to no longer contain hazardous waste or contaminated debris.

73. DOE shall implement the Container Sampling and Analysis Plan set forth in Attachment G of this Agreed Order for the containers listed in Attachment B of this Agreed Order. The containers identified in Attachment B as being "previously characterized" have been sufficiently characterized for purposes of making a contained-in determination, and no further characterization or sampling for those containers is required under this Agreed Order. Based on the review of the characterization data, the Cabinet hereby grants DOE's January 24, 2003 contained-in request that the wastes in the containers no longer contain listed hazardous waste. In making this determination, the Cabinet makes no determination regarding the nature or characteristics of the wastes in the containers at any time prior to January 24, 2003. Based on this determination, the wastes in the containers and the containers themselves do not require management as hazardous wastes, and no further action is required under this Agreed Order for the containers.

74. DOE shall complete implementation of the Container Sampling and Analysis Plan, set forth in Attachment G by September 30, 2007. During implementation of the Container Sampling and Analysis Plan, DOE may request a revision of the sampling protocols. The Cabinet will review DOE's requested revision and either approve the revision or issue a Notice of Deficiencies identifying the specific deficiencies and include an explanation of the Cabinet's position. DOE shall respond to the deficiencies and resubmit the sampling protocol within thirty (30) days of receipt of written notice from the Cabinet. The Cabinet will review the revised protocol and either approve the revised protocol or issue a second Notice of Deficiencies. Upon receipt of

the second Notice of Deficiencies, DOE may either invoke the consultation process of this Agreed Order, revise the protocol as requested by the Cabinet, or withdraw the proposed revision.

75. Within sixty (60) days of receipt of final validated data for entry into the OREIS database for each distinct storage area designated in Attachment J, DOE shall submit its contained-in determination and all supporting analytical data to the Cabinet. The Cabinet will review DOE's determination and supporting analytical data and provide DOE with notification of any concerns the Cabinet has within thirty (30) days. The site-specific health-based levels for determining whether contaminated media/debris still contains or is no longer contaminated with hazardous waste are as follows: TCE-39.2 ppm for solids; and 1,1,1 TCA-2080 ppm for solids. The site-specific health-based levels for determining whether contaminated groundwater destined for on-site treatment and discharge through KPDES permitted outfalls (e.g., groundwater resulting from well-purging, well development, and well sampling) still contains listed hazardous waste (TCE and 1,1,1 TCA) are as follows: .081 ppm TCE. Groundwater that meets the health-based level for TCE shall also be deemed to no longer contain 1,1,1 TCA.

76. Solids that are determined to be below the levels set forth in paragraph 75 and that are not characteristically hazardous but that cannot be disposed in the C-746-U landfill shall be deemed to no longer contain or to no longer be contaminated with listed hazardous waste (F001, F002, U228) and may be managed in accordance with applicable low-level waste and TSCA requirements until dispositioned to an appropriate off-site facility. The Cabinet agrees to consult with DOE and the State where the off-site facility is located to reach agreement on the appropriate health-based

standard for making contained-in determinations for wastes that are to be shipped to such facility.

77. Environmental media and debris addressed pursuant to the site-wide contained-in protocol set forth in Attachment D, and established to contain concentrations of TCE and TCA below the health-based contained-in levels set forth therein, shall be deemed not to contain or not to be contaminated with listed hazardous wastes. Containers holding contaminated media/debris that no longer contain or are not contaminated with a listed hazardous waste (and are not otherwise hazardous by characteristic) do not need to be managed as hazardous waste. No further actions shall be required for such waste containers under this Agreed Order. Determinations under this paragraph shall be based upon the results from the Container Sampling and Analysis Plan. In making contained-in determinations pursuant to paragraphs 75-77, the Cabinet is not making any determination regarding the nature or characteristic of the suspect listed waste at any time prior to the date of the contained-in determination.

78. On an annual basis until January 1, 2008, DOE shall submit revisions to its Part A Hazardous Waste Permit to include identification of additional non-DMSA SWMUs storing characteristic hazardous waste or listed hazardous waste in excess of contained-in levels without a permit during characterization of non-DMSA SWMUs. For all the containers in a given SWMU, where DOE has identified newly discovered characteristic hazardous wastes or listed hazardous wastes above contained-in levels, DOE shall prepare and submit a revised SWMU Assessment Report in accordance with condition IV.B.3 of its Hazardous Waste Permit on an annual basis until January 1, 2008. This paragraph shall not apply to newly generated waste.

79. Within twenty (20) days of receipt of final validated data for entry into the OREIS database for the waste in individual containers, DOE shall, in accordance with 401 KAR 32:030 and 401 KAR 34:180, properly label all hazardous waste or mixed waste identified and move the wastes to available RCRA compliant storage areas (e.g., permitted storage, Satellite Accumulation Areas).

80. For each SWMU, within twenty (20) days of DOE's receipt of final validated data for entry into the OREIS database from the Container Sampling and Analysis Plan, DOE shall notify the Cabinet of the type of any hazardous waste discovered, the SWMU it had been stored in, the date the hazardous or mixed waste was moved to available RCRA compliant storage areas (e.g., permitted storage, Satellite Accumulation Areas), and, where appropriate, the permitted storage unit to which it was, or is anticipated to be, moved.

81. In the annual update for the STP, DOE shall include all newly discovered mixed waste identified during the implementation of the Container Sampling and Analysis Plan for the previous year in accordance with the terms and conditions of the September 10, 1997, Agreed Order and approved STP for mixed waste.

82. Based on the Cabinet's review of DOE's screening process referred to in Paragraph 21, the balance of the approximately 33,000 containers referenced in paragraph 19 of this Agreed Order (generated prior to February 5, 2002) and not listed in Attachment B of this Agreed Order do not require any further characterization for F001, F002, and/or U228 listed wastes. No further action will be required for these containers under this Agreed Order. This determination is based on the Cabinet's review of DOE's screening process, a site visit by Cabinet personnel to conduct a record review of

information pertaining to the screening process, and discussions with site personnel involved in conducting the screening process. The Cabinet reserves the right to require additional characterization of the containers based on additional information.

D. CLOSURE REQUIREMENTS FOR UNPERMITTED HAZARDOUS WASTE STORAGE UNITS

1. Closure, Post-Closure, and Corrective Action for Groundwater for All Units

83. For DMSA and non-DMSA SWMUs requiring closure under this Agreed Order, DOE has the option to (a) conduct final closure, (b) conduct partial closure (excluding subsurface soils and groundwater), with final closure (including subsurface soils and groundwater) to be deferred to response actions selected and implemented under the FFA, or (c) solely for inside units, defer any closure activity to response activities to be selected and implemented under the FFA.

84. If any activities for final closure for a unit are deferred to response actions selected and implemented under the FFA, any necessary post-closure or groundwater corrective action for such unit shall also be deferred to response actions selected and implemented under the FFA. Pursuant to CERCLA Section 121 (e)(1), modification of DOE's Part B Hazardous Waste Permit to include closure, post-closure care or groundwater corrective action requirements is not required for closure, post-closure and groundwater corrective action deferred to the FFA under this Agreed Order. DOE will submit appropriate permit documentation for units not deferred to the FFA.

85. Corrective action for groundwater shall not be required for any unit under this Agreed Order that is, or may be deemed in the future to be, a hazardous waste management unit, including DMSAs, non-DMSAs, and the C-746-U, -S, and -T landfills, unless substantial evidence affirmatively establishes that a contaminant of concern in groundwater is a result of a release of hazardous waste or hazardous constituents from that unit. Corrective action for groundwater so linked to a unit shall be deferred to response actions to be selected and implemented under the FFA. The groundwater remediation decision process will consider Alternative Contaminant Levels, alternative points of compliance, natural attenuation, cost-effectiveness (as required by CERCLA) and technical practicability.

86. For all inside and outside units being deferred to response actions selected and implemented under the FFA, the closure, post-closure and groundwater protection standards will be considered, and selected (or waived) as appropriate, as Applicable, Relevant and Appropriate Requirements (ARARs) in accordance with the Comprehensive Environmental Compensation and Liability Act (CERCLA) and FFA processes and standards. Such units will be treated as SWMUs under the FFA. The CERCLA requirements, including the CERCLA nine criteria for selecting remedial actions (as well as ARARs), will guide selection of a response action for such units. Schedules for selecting and implementing a response action for all such units will be established by FFA procedures. For the purposes of making ARARs determinations under the FFA, the Cabinet agrees that its groundwater corrective action requirements should not be considered to be ARARs for the purposes of making groundwater remediation decisions for a unit unless there is substantial evidence that affirmatively

establishes that a contaminant of concern in the groundwater is a result of a release of a hazardous waste or hazardous constituent from such unit. For purposes of making ARARs determinations under the FFA, the Cabinet agrees that its closure/post-closure requirements should only be considered to be ARARs for such a unit where hazardous waste is discovered which has been stored in excess of the time frames established in the KAR, and, with respect to potentially listed hazardous waste, where the contained-in levels in Attachment D have been exceeded

87. Unless otherwise specifically provided in this Agreed Order, for all units addressed under this Agreed Order, including DMSAs, non-DMSAs, and the C-746-U, -S, and –T landfills: (a) closure and post-closure requirements shall only apply for units where hazardous waste is discovered which has been stored in excess of the time frames established in the KAR, and, with respect to potentially listed hazardous waste, where the contained-in levels in Attachment D have been exceeded; and (b) groundwater corrective action requirements shall not apply unless substantial evidence affirmatively establishes that a contaminant of concern in groundwater is a result of a release of a hazardous waste or a hazardous constituent from the unit in question.

88. For all units addressed under this Agreed Order, including DMSAs, non-DMSAs, and the C-746-U, -S, and -T landfills, closure and post-closure requirements of this Agreed Order (including the final ("clean") closure and partial-closure standards referenced below), shall not apply to contamination within or from a unit unless the contamination is a result of a release of hazardous waste from such unit.

2. DMSAs and Non-DMSA SWMUs

89. Within one-hundred twenty (120) days of completion of characterization of a DMSA or non-DMSA SWMU and receipt of final validated data for entry into the OREIS database, where the data or process knowledge demonstrates that characteristic hazardous waste or listed hazardous waste in excess of contained-in levels has been stored in unpermitted areas, DOE shall either submit a closure plan for the DMSA or non-DMSA SWMU identified as an unpermitted hazardous waste storage unit at PGDP, or if the unit is an inside DMSA or inside non-DMSA SWMU, submit a notification to the Cabinet that closure will be deferred to response actions selected and implemented under the FFA pursuant to paragraphs 83-88 Closure plans for final closure shall comply with 401 KAR 34:070. Within ninety (90) days of entry of this Agreed Order, DOE may withdraw previously submitted closure plans and resubmit them consistent with the provisions of this paragraph.

90. The closure plan may propose final and/or partial closure of the units. Final closure ("clean closure") requires removal or decontamination of hazardous waste and hazardous constituents from the unit, including subsurface soils and groundwater without use of institutional or engineering controls. It is the Cabinet's position that the final closure ("clean closure") standard equates to an excess cancer risk of 1x10(-6) and a hazard index of 1. If DOE elects to meet the Cabinet's asserted final closure standard using engineering or institutional controls, the unit will be subject to post-closure requirements of 401 KAR 34:070. Partial closure requires removal or decontamination of hazardous waste and hazardous constituents from the unit to achieve the partial closure standard, which equates to an excess cancer risk of 1 x 10 (–4) and a hazard index of 3,

exclusive of groundwater and subsurface soils (for purposes of this Agreed Order subsurface soils mean soils one foot or more below the surface), using the appropriate exposure assumptions contained in "Methods for Conduction Risk Assessments and Risk Evaluations at the Paducah Gaseous Diffusion Plant (DOE/OR/07-1506-December 2000)." DOE shall attempt to meet the partial closure standard for outside units by the physical removal or decontamination of the hazardous waste and hazardous constituents rather than controlling exposure by institutional or engineering controls. Provided, however, that for outside units, DOE shall not be required to remove subsurface soils to achieve the 1 x 10 (-4) and hazard index of 3 standard. Where DOE has removed the surface soils (i.e., one foot of soil) and such removal is not sufficient to achieve the 1 x 10 (-4) and hazard index of 3 standard without institutional or engineering controls, DOE may implement such institutional or engineering controls as are necessary to achieve the 1 x 10 (-4) and hazard index of 3 standard. The partial closure plan shall discuss which type(s) of institutional or engineering controls would be utilized if necessary to achieve the 1 x 10 -4 and hazard index of 3 standard and shall also discuss how any such controls would be maintained. For inside units, DOE shall meet the partial closure standard by either the physical removal and/or decontamination of the hazardous waste and hazardous constituents. The closure plan shall either provide that closure (either final or partial) must be completed within one hundred and eighty (180) days of approval of the closure plan or propose another time for completion for the Cabinet's approval.

91. If DOE elects to conduct partial closure activities, the closure plan shall describe that final closure of the units, including groundwater and subsurface soils, will be deferred to response actions taken under the FFA. Upon deferral, final closure, and

any necessary post-closure and groundwater corrective action will be addressed pursuant to paragraphs 83-88 of this Agreed Order.

92. The Cabinet will review DOE's closure plan within forty-five (45) days of receipt and either approve the closure plan or issue a Notice of Deficiency identifying the specific deficiencies and include an explanation of the Cabinet's position. DOE shall respond to the deficiencies and resubmit the plan(s) within thirty (30) days of receipt of written notice from the Cabinet. The Cabinet will review the revised plan within thirty (30) days of receipt and either approve the revised plan or issue a second Notice of Deficiency. Upon receipt of the second Notice of Deficiency, DOE shall comply with the provisions of Paragraphs 118-126.

93. DOE shall follow the requirements set out in paragraphs 94-100 for final closure and paragraphs 101-108 for partial closure activities.

a. FINAL CLOSURE

94. Within sixty (60) days of closure of each unpermitted hazardous waste storage unit according to the approved closure plan for final closure, DOE shall submit a final closure report which demonstrates whether closure was accomplished in accordance with the requirements of the plan.

95. The Cabinet will review DOE's closure report within thirty (30) days of receipt for each unpermitted hazardous waste storage unit and either approve the closure report or issue a Notice of Deficiency identifying the specific deficiencies and include an explanation of the Cabinet's position. DOE shall respond to the deficiencies and resubmit the report within thirty (30) days of receipt of written notice from the Cabinet.

The Cabinet will review the revised report within thirty (30) days of receipt and either approve the revised report or issue a second Notice of Deficiency. Upon receipt of the second Notice of Deficiency, DOE shall comply with the provisions of Paragraphs 118-126.

96. If the closure report fails to demonstrate closure in accordance with 401 KAR 34:070, DOE may (a) implement additional closure activities by submitting a supplemental closure plan and report which shall be reviewed and implemented in accordance with the provisions of paragraphs 92-93; or (b) pursue partial closure for the unit (in accordance with paragraphs 89-93); or (c) if the unit is an inside unit, defer the final closure to response actions under the FFA (in accordance with paragraphs 83-88). DOE shall either invoke the consultation process set forth in paragraphs 118-126 or notify the Cabinet within thirty (30) days of receipt of notice that it has failed to meet the final closure standard of which option DOE intends to pursue, and thirty (30) days thereafter shall submit the appropriate plan/notice for the option it has chosen to pursue.

97. If DOE is unable to demonstrate closure by removal or decontamination of hazardous waste and hazardous constituents from the unpermitted hazardous waste storage unit in accordance with 401 KAR 34:070 (i.e., "clean close"), and DOE fails to either invoke the consultation process set forth in paragraphs 118-126 or notify the Cabinet that it intends to pursue the options in paragraph 96 above, the Cabinet will notify DOE that DOE must submit an amended closure plan for closure of the unit in accordance with 401 KAR 34:230, and a post-closure plan for conducting post-closure care in accordance with KRS 224.46-520 and 401 KAR 34:070.

98. Within ninety (90) days of receipt of written notification specified in paragraph 97, DOE shall submit an amended closure and post-closure plan for closure of the unpermitted hazardous waste storage unit pursuant to 401 KAR 34:070 and 401 KAR 34:230. The Cabinet will review DOE's amended closure/post-closure plan within thirty (30) days of receipt and either approve the amended closure/post-closure plan or issue a Notice of Deficiency identifying the specific deficiencies and include an explanation of the Cabinet's position. DOE shall respond to the deficiencies and resubmit the plan within thirty (30) days of receipt of written notice from the Cabinet. The Cabinet will review the amended plan within thirty (30) days of receipt and either approve the amended plan or issue a second Notice of Deficiency. Upon receipt of the second Notice of Deficiency, DOE shall comply with the provisions of Paragraphs 118-126.

99. Within fifteen (15) days of notice of approval of the closure/post-closure plan, DOE shall begin implementation of the closure/post closure plan and complete closure according to the approved schedule contained therein. Upon completion of closure activities, DOE shall conduct post-closure care for the unit pursuant to the approved post-closure care plan.

100. Pursuant to CERCLA Section 121(e)(1), modification of DOE's Part B Hazardous Waste Permit to include post-closure care procedures for the unpermitted hazardous waste storage unit is not required for units deferred to the FFA. However, with respect to such units, DOE must comply with all the substantive requirements of KRS 224.46-520 and 401 KAR 34:070, sections 8-11 that are determined to be ARARs (and are not waived) as discussed in paragraph 86. DOE will submit appropriate permit documentation for units not deferred to the FFA.

b. PARTIAL CLOSURE

101. Within sixty (60) days of partial closure of each unpermitted hazardous waste storage unit, DOE shall submit a partial closure report which demonstrates whether partial closure was accomplished in accordance with the requirements of the plan and the partial closure standard outlined in paragraph 90.

102. The Cabinet will review DOE's partial closure report for each unpermitted hazardous waste storage unit within thirty (30) days of receipt and either approve the partial closure report or issue a Notice of Deficiency identifying the specific deficiencies and include an explanation of the Cabinet's position. DOE shall respond to the deficiencies and resubmit the report within thirty (30) days of receipt of written notice from the Cabinet. The Cabinet will review the revised report within thirty (30) days of receipt and either approve the revised report or issue a second Notice of Deficiency. Upon receipt of the second Notice of Deficiency, DOE shall comply with the provisions of Paragraphs 118-126.

103. If the partial closure report fails to demonstrate closure in accordance with the plan and partial closure standard, DOE may (a) implement additional partial closure activities by submitting a supplemental partial closure plan and report which shall be reviewed and implemented in accordance with the provisions of paragraphs 92-93; or (b) submit a final closure plan which shall be reviewed and implemented in accordance with the provisions of paragraphs 92-93; or (c) if the unit is an inside unit, defer the final closure to response actions under the FFA (in accordance with paragraphs 83-88). DOE shall either invoke the consultation process set forth in paragraphs 118-126 or notify the

Cabinet within thirty (30) days of receipt of notice that it has failed to meet the partial closure standard of which option DOE intends to pursue, and thirty (30) days thereafter shall submit the appropriate plan/notice for the option DOE has chosen to pursue.

104. If DOE is unable to demonstrate partial closure by meeting the partial closure standard referenced herein, and DOE fails to either invoke the consultation process set forth in paragraphs 118-126 or notify the Cabinet that it intends to pursue the options in paragraph 103 above, the Cabinet will notify DOE that it must proceed to post-closure.

105. Within thirty (30) days of receipt of written notification specified in paragraph 104, DOE shall submit a revised closure and post-closure plan for closure of the unpermitted hazardous waste storage unit pursuant to 401 KAR 34:070 and 401 KAR 34:230. The Cabinet will review DOE's revised closure/post-closure plan within thirty (30) days of receipt and either approve the revised closure/post-closure plan or issue a Notice of Deficiency identifying the specific deficiencies and include an explanation of the Cabinet's position. DOE shall respond to the deficiencies and resubmit the plan within thirty (30) days of receipt of written notice from the Cabinet. The Cabinet will review the revised plan within thirty (30) days of receipt and either approve the revised plan or issue a second Notice of Deficiency. Upon receipt of the second Notice of Deficiency, DOE shall comply with the provisions of Paragraphs 118-126.

106. Within fifteen (15) days of notice of approval of the closure/post-closure plan, DOE shall begin implementation of the closure/post closure plan according to the approved schedule contained therein.

107. Pursuant to CERCLA Section 121(e)(1), modification of DOE's Part B Hazardous Waste Permit to include post-closure care procedures for the unpermitted hazardous waste storage unit is not required for units deferred to the FFA. However, with respect to such units, DOE must comply with all the substantive requirements of KRS 224.46-520 and 401 KAR 34:070, sections 8-11 that are determined to be ARARs (and are not waived) as discussed in paragraph 86. DOE will submit appropriate permit documentation for units not deferred to the FFA.

108. If the Cabinet approves DOE's partial closure report, then final closure/post-closure will be deferred to response actions selected and implemented under the FFA in accordance with paragraphs 83-88.

E. CONTAINED-IN DETERMINATION FOR THE C-746-U SOLID WASTE LANDFILL

109. On February 21, 2003, the Cabinet approved a Sampling and Analysis Plan for the suspect hazardous waste disposed in Phases 1 and 2 of the C-746-U landfill designed to allow DOE to make a hazardous waste determination with respect to the suspect waste placed in the C-746-U landfill.

110. DOE implemented the approved Sampling and Analysis Plan in accordance with the schedule contained therein. In addition to DOE's sampling, the Cabinet took split samples in order to verify DOE's sampling data.

111. On July 23, 2003, DOE submitted a request for a contained-in determination to the Division of Waste Management for review. The Cabinet has reviewed DOE's data, as well as the data from the split samples, to determine whether the contaminated media

in the landfill still contains listed hazardous waste. For the purposes of this Agreed Order, the site-specific health-based levels for determining whether the contaminated media in the landfill still contains hazardous waste are as follows: TCE-39.2 ppm and 1,1,1 TCA-2,080 ppm for solids.

112. Based on the review of the sampling data, the Cabinet hereby grants DOE's July 23, 2003, contained-in request that the identified suspect contaminated media no longer contains listed hazardous waste. In making this determination, the Cabinet makes no determination regarding the nature or characteristics of the suspect waste placed in the C-746-U landfill at any time prior to July 23, 2003. Based on this determination, the wastes do not require management as hazardous wastes and the C-746-U landfill does not require closure, post-closure or corrective action under the Cabinet's hazardous waste management program and no further action is required under this Agreed Order for the C-746-U-Landfill. DOE may resume disposal of solid waste in the C-746-U landfill in accordance with its solid waste disposal permit.

F. CLOSURE/POST-CLOSURE OF THE C-746-S AND C-746-T SOLID WASTE LANDFILLS

113. The Cabinet agrees that the C-746-S solid waste landfill shall be addressed by any necessary response actions selected and implemented under the FFA for the Groundwater and Burial Grounds Operable Units in lieu of any otherwise required hazardous waste closure/post-closure or regulated unit corrective action requirements of KRS 224 subchapter 60 and the regulations promulgated pursuant thereto. Further, the Cabinet agrees that within 10 days of finalization of any CERCLA decision document selecting a response action that addresses potential releases from the C-746-S solid waste

landfill to groundwater, that the Cabinet will modify DOE's existing C-746-S solid waste permit to reflect that any necessary groundwater corrective action will be addressed by the response actions selected and implemented under the FFA. The Cabinet also agrees that, for the purposes of making ARARs determinations under the FFA, the Cabinet's groundwater corrective action requirements shall only be considered to be ARARs for the purposes of making groundwater remediation decisions for the C-746-S landfill where there is substantial evidence that affirmatively establishes that a contaminant of concern in the groundwater is a result of a release of a hazardous waste or hazardous constituent from the C-746-S landfill. The Cabinet further agrees that, for purposes of making ARARs determinations under the FFA, the Cabinet's closure/post-closure requirements shall only be considered to be ARARs where hazardous waste is discovered which has been stored in excess of the time frames established in the KAR, and, with respect to potentially listed hazardous waste, where the contained-in levels in Attachment D have been exceeded.

114. No later than September 30, 2003, DOE shall submit a site investigation scoping plan for the C-746-S and C-746-T landfills to the Cabinet and EPA designed to evaluate whether the landfills are sources of groundwater contamination. The scope of the site evaluation includes a field investigation to determine whether the landfills are a source of the TCE groundwater contamination in the area or whether the groundwater contamination in the groundwater at the C-746-S and C-746-T landfills is migrating from upgradient source areas. The field investigation will include the installation of approximately 10 subsurface borings to collect groundwater samples from both upgradient and downgradient locations.

115. Based on the Cabinet's review of DOE's recently developed information (described in Attachment K), the Cabinet has determined that it cannot conclude that F001, F002, or U228 listed waste (TCE, 1,1,1, TCA) was disposed in the C-746-T-landfill. Based on this determination, the C-746-T landfill does not require management as a hazardous waste management unit and does not require closure, or post-closure, or corrective action under the Cabinet's hazardous waste management program and, except as provided in the preceding paragraph, no further action is required under this Agreed Order for the C-746-T landfill. This determination is based exclusively on DOE's recently developed information. The Cabinet is not precluded from making a different determination based on additional information consisting of credible analytical data or other substantial evidence affirmatively demonstrating that listed waste was actually disposed in the C-746-T landfill. Corrective action for groundwater shall not be required unless substantial evidence affirmatively establishes that a contaminant of concern in the groundwater is a result of a release of a hazardous waste or hazardous constituent from the C-746-T landfill.

G. DIVISION OF WATER REMEDIAL MEASURES

116. DOE shall comply with the provisions of the Toxicity Reduction Evaluation (TRE) Plan submitted on March 20, 2003, to determine the source(s) of the toxicity within two hundred seventy (270) days of entry of this Agreed Order. (a) Within ninety (90) days of determining the source(s) of the toxicity, DOE shall submit a revised TRE Plan for Cabinet review and approval that includes appropriate measures and an implementation schedule to meet the toxicity limits of its KPDES permit. (b) In the event

DOE is unable to determine the source(s) of the toxicity within two hundred seventy (270) days, DOE shall, within ninety (90) days, following the expiration of the two hundred seventy (270) day period, submit a revised TRE Plan for the Cabinet's review and approval that includes appropriate measures to address the toxicity (e.g., treatment approach, additional sampling to determine toxicity, etc.) and an implementation schedule to meet the toxicity limits of its KPDES permit. The timeframes set forth in this paragraph shall be subject to the extension provisions set forth in paragraphs 148-149.

117. The Cabinet agrees to apply the wastewater concentrations of 1ppm TCE and 25 ppm 1,1,1 TCA, as promulgated in 401 KAR Chapter 31:010, Section 3(1)(b)4. a. and b., to well purge water, well sampling water, and well development water that is generated by DOE during any sampling and investigation efforts associated with the PGDP facility, provided the water is destined for treatment at an onsite wastewater treatment facility and discharged through a PGDP KPDES permitted outfall. The Cabinet considers well purge water, well sampling water, and well development water that meet the above-stated concentrations and regulatory provisions to be excluded from the definition of hazardous waste.

III. CONSULTATION PROCESS

118. Except as otherwise specifically provided for in this Agreed Order, DOE may utilize the procedures outlined below either upon receipt of a Second Notice of Deficiencies issued by the Cabinet on a plan/report required by this Agreed Order or for any other dispute which arises concerning this Agreed Order, including attachments thereto.

119 DOE and the Cabinet shall first attempt to resolve expeditiously and informally all disputes at the project manager level. This informal consultation shall be limited to a period of ten (10) days from the occurrence of the event giving rise to the dispute.

120. In the event that any dispute is not resolved through informal means, within fifteen (15) days after the end of the informal consultation period, DOE shall give written notice to the Cabinet of its intent to invoke the formal consultation process. In the event DOE fails to submit the written notice required by this paragraph, DOE shall be deemed to have waived its right to the formal consultation process.

121. DOE's written notice of its intent to invoke the formal consultation process shall include a written statement of the issue in dispute, the relevant facts upon which the dispute is based, the factual data, analysis or opinion supporting its position, and supporting documentation on which DOE relies along with an explanation of what work is or will be affected by the dispute, including any impacts on compliance dates. The DOE project manager shall develop DOE's written notice of intent to invoke the formal consultation process in concert with the Cabinet's project manager and shall include with DOE's written notice any written positions and supporting documentation

provided to DOE by the Cabinet's project manager within the fifteen (15) day period. The Cabinet shall submit a written response to DOE within fifteen (15) days of receipt of DOE's notification. Within fifteen (15) days of DOE's receipt of the Cabinet's response to DOE, DOE's Manager of the Portsmouth/Paducah Project Office and the Cabinet's Director of the Division of Waste Management (Director) shall engage in meetings or conference calls.

122. Within ten (10) days of the meeting/conference call referenced in paragraph 121, the Director of the Division of Waste Management will notify DOE in writing of the Cabinet's determination of whether deficiencies still exist (if the dispute involves deficiencies in a plan/report) or otherwise issue a resolution of the dispute. If DOE disagrees with the Director's determination, DOE may, within ten (10) days of receipt of the Director's determination, request a consultation meeting with the Commissioner of the Department of Environmental Protection. If DOE requests a meeting/consultation, then the requested meeting/conference call shall take place within fifteen (15) days of the Cabinet's receipt of the request. Within ten (10) days of the meeting/conference call, the Commissioner will notify DOE in writing of the Cabinet's determination of whether deficiencies still exist or otherwise issue a final resolution of the dispute.

123. If the Cabinet determines that a deficiency still exists, DOE shall have thirty (30) days from receipt of the Cabinet's written determination to submit a revised plan/report to respond to the deficiencies or, if the dispute does not involve deficiencies in a plan/report, otherwise comply with the Cabinet's determination. The Cabinet will review the revised report/plan and issue its final determination to DOE. If the Cabinet

disapproves the plan/report, this shall constitute the Cabinet's determination that DOE has violated the Agreed Order and shall be deemed to be a final determination by the Cabinet. The Cabinet's disapproval of a plan/report or other final determination shall be subject to judicial or administrative review in accordance with applicable law. It is the Cabinet's position that DOE must exhaust its administrative remedies before the Cabinet prior to seeking judicial review of any final determinations by the Cabinet.

124. The pendency of any dispute under these procedures shall not affect DOE's responsibility for timely performance of the work required by this Agreed Order, except that the time period for completion of work affected by such dispute shall be extended for a period of time at least equaling the actual time taken to resolve any dispute in accordance with the procedures specified herein. All elements of the work required by this Agreed Order that are not affected by the dispute shall continue and be completed in accordance with the applicable schedule.

125. In any proceeding under this Section, the parties may by written agreement modify the procedures of paragraphs 118-124 above, including but not limited to an extension or shortening of the times therein or the waiver of any provision set forth in such paragraphs.

126. The Parties shall exhaust the Consultation Process (through the Cabinet's issuance of its final determination to DOE) prior to initiating administrative or judicial action with respect to any Second Notice of Deficiencies issued by the Cabinet on a plan/report required by this Agreed Order or for any other dispute which arises concerning this Agreed Order.

IV. BUDGET REQUIREMENTS

127. It is the Cabinet's position that it is DOE's obligation to obtain the funding necessary to comply with all the requirements in this Agreed Order.

128. It is DOE's position that any requirement for the payment or obligation of funds by DOE established by the terms of the Agreed Order is subject to the availability of appropriated funds, and that the Agreed Order shall not be interpreted to require the obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. Section 1341.

129. If appropriated funds are not available to fulfill DOE's obligations under the Agreed Order, DOE shall nevertheless make a good faith effort to comply with the requirements of this Agreed Order. If DOE's good faith efforts fail, DOE shall meet promptly with the Cabinet to discuss whether the parties can reach an accommodation on adjustments to deadlines that require the payment or obligation of such funds. If no agreement can be reached, then the Cabinet and DOE agree that the Cabinet may initiate an action to enforce any provision of the Agreed Order, and DOE may raise as a defense that its delay was caused by the unavailability of appropriated funds. The Cabinet disagrees that the lack of appropriations or funding is a valid defense. It is the Cabinet's position that the federal Anti-Deficiency Act, 31 U.S.C. Section 1341, does not apply to any obligation set forth under this Agreed Order. However, the Cabinet and DOE agree and stipulate that it is premature at this time to raise and adjudicate the existence of such a defense.

V. PENALTIES

130. DOE shall pay a civil penalty of one million dollars **($1,000,000)** in four installments of two hundred and fifty thousand dollars **($250,000.00).** The first installment is due and payable within thirty (30) days of entry of this Agreed Order by the Secretary. Subsequent payments are due and payable ninety (90) days, one hundred eighty (180) days, and two hundred seventy (270) days from the date the initial payment is due. Payment shall be made by cashier's check, certified check or money order made payable to the Kentucky State Treasurer and sent to the attention of Manager, Enforcement Branch, Division of Waste Management, 14 Reilly Road, Frankfort, Kentucky, 40601, or by electronic funds transfer.

131. DOE shall expend $200,000 on an environmental project(s). Such environmental project(s) must be mutually acceptable to both DOE and the Cabinet and shall not require amendment or modification to this Agreed Order to identify such project(s). Within ninety (90) days of entry of this Agreed Order, the parties will meet to identify the environmental project(s).

132. DOE may be assessed a stipulated penalty of up to five thousand dollars ($5,000.00) for the first week (or part thereof) and up to ten thousand dollars ($10,000.00) for each additional week (or part thereof) for failure to comply with any of the terms of this Agreed Order, including timely submission of any plans, or reports required by this Agreed Order and for failure to complete any requirement contained in an approved plan, or report. The stipulated penalties are in lieu of any other statutory penalty that may be assessed. Failure to pay stipulated penalties shall not be cause for the assessment of additional stipulated penalties.

133. If the Cabinet determines a stipulated penalty is due, the Cabinet will send DOE written notice, including the amount of the stipulated penalty. If DOE disagrees with the required payment or otherwise believes a request for payment is erroneous or contrary to law, it may invoke the consultation process set forth in paragraphs 118-126. If DOE invokes the consultation process set forth in Section III of this Agreed Order, no assessment of a stipulated penalty shall be final, and DOE shall have no obligation to pay until the conclusion of the consultation procedures, including any administrative or judicial review, related to the assessment of the stipulated penalty. DOE's invocation of the consultation process shall toll the obligation to pay the assessed penalty, but, shall not toll the accrual of stipulated penalties for such time as the alleged failure upon which the penalty was based continues. If the stipulated penalty is upheld on appeal, DOE shall submit the stipulated penalty amount within thirty (30) days of receipt of the final appellate decision.

VI. FORCE MAJEURE

134. A force majeure event is defined as an event arising from causes not reasonably foreseeable and beyond the control of DOE or their consultants or engineers or contractors, which could not be overcome by DOE's due diligence and which delays or prevents performance as required by this Agreed Order, or as any event which the parties mutually agree to be a force majeure event

135. Force majeure events do not include unanticipated or increased costs of performance, changed economic or financial circumstances, normal precipitation events,

or failure of a contractor to perform or failure of a supplier to deliver unless such failure is, itself, the result of force majeure.

136. DOE shall notify the Manager of the Enforcement Branch, Division of Waste Management by telephone (502-564-6716) within seventy-two (72) hours and in writing within ten (10) days business days after it becomes aware of events which it knows may constitute a force majeure. DOE's written notice shall provide an estimate of the anticipated length of delay, including any necessary period of time for demobilization and remobilization of contractors or equipment; a description of the cause of delay; a description of measures taken or to be taken by DOE to minimize delay, including a timetable for implementing these measures. Failure to comply with the notice provisions shall be grounds for the Cabinet to deny granting an extension of time to DOE. However, the Cabinet may in its sole discretion grant a request for extension for force majeure where DOE has failed to comply with the notice provisions.

137. If DOE successfully demonstrates to the Cabinet that the delay has been or will be caused by a force majeure event, the Cabinet will grant an extension of the time. In such cases, DOE will be granted a period of time at least equal to the length of delay.

138. All force majeure extensions shall be accomplished through a written amendment of this Agreed Order, unless the parties agree otherwise.

139. Any dispute arising over the application of the force majeure provisions of paragraphs 134-139 or the occurrence or impact of a force majeure event shall be subject to the consultation process described in paragraphs 118-126.

MISCELLANEOUS PROVISIONS

140. All submittals required of DOE by this Agreed Order shall be to the Manager, Enforcement Branch, Division of Waste Management, Department of Environmental Protection, 14 Reilly Road, Frankfort, Kentucky 40601. The Cabinet shall submit comments/notifications required by this Agreed Order to the DOE Paducah Site Manager, Post Office Box 1410, Paducah, Kentucky 42001-1410. Unless otherwise specified, any submittal or notice provided pursuant to this Agreed Order shall be sent by certified mail, return receipt requested, or similar method (including electronic transmission) which provides a written record of the sending and receiving date. Unless otherwise specified or requested, all routine correspondence other than a document or submittal may be sent as described above, or may be sent via regular mail or electronically transmitted to the above persons. Any party may change the individual designated to receive submittals and notifications required under this Agreed Order by providing written notice to the other party.

141. This Agreed Order addresses only those matters specifically set out or referred to above. The Cabinet enters into this Agreed Order, in part, based upon information supplied by DOE. Except as provided in this Agreed Order, nothing contained herein shall be construed to waive or limit any remedy or cause of action by the Cabinet based on statutes or regulations under its jurisdiction and DOE reserves its rights and defenses thereto. For matters not addressed in this Agreed Order, the Cabinet reserves its right at any time to issue administrative orders or to take any other action it deems necessary, including the right to order all necessary remedial measures, assess

penalties for violations or recover any response costs that may be incurred, and DOE reserves its rights and defenses thereto.

142. Except as otherwise provided herein, this Agreed Order shall not prevent the Cabinet from issuing, reissuing, renewing, modifying, revoking, suspending, denying, terminating, or reopening any permit to DOE, and DOE shall not use this Agreed Order as a defense to those permit actions.

143. The Cabinet agrees to allow the performance of the above-listed remedial measures, payment of civil penalties and implementation of environmental projects by DOE, to satisfy the obligations of DOE, its past or present officers, directors, officials, or employees to the Cabinet, with respect to the violations and potential violations addressed in this Agreed Order, including, (a) the notices of violation described above and attached hereto (Attachment L), (b) the not yet cited violations and potential violations referenced in paragraphs 16-62, (c) violations and potential violations of KRS 224 Subchapter 46 and 401 KAR Chapters 30-40 that have been discovered to date and that may be discovered through implementation of the Characterization/Sampling and Analysis Plan for the DMSAs, (d) violations and potential violations of KRS 224 Subchapter 46 and 401 KAR Chapters 30-40 that have been discovered to date and that may be discovered through implementation of the Container Sampling and Analysis Plan for the suspect listed hazardous waste containers referenced in Attachment B, and (e) all violations and potential violations alleged in NREPC v. DOE, file numbers DWM-31434-042 and DOW-26141-042, and DAQ-31740-30 . Except as otherwise provided herein, this Agreed Order shall stand in lieu of any administrative, legal, or other equitable actions that the Cabinet may bring against DOE, its past or present officers,

directors, officials, or employees, for the matters addressed herein. Nothing contained in this Agreed Order, including the Consultation Process, shall be construed to prevent the Cabinet from seeking administrative, legal or equitable relief to enforce the terms of this Agreed Order or from taking other administrative, legal or equitable action as deemed appropriate and necessary, including seeking penalties against DOE, for noncompliance with this Agreed Order. With respect to matters not addressed by this Agreed Order, nothing contained herein shall be construed to prevent the Cabinet from exercising its lawful authority to require DOE to perform additional activities at the facility, pursuant to KRS 224 and the regulations promulgated thereto, or other applicable law in the future and DOE reserves its defenses to such actions.

144. Consistent with the FFA, the Cabinet reserves its rights to maintain that the closure/post-closure/corrective action requirements in KRS 224 Subchapter 46 and 401 KAR Chapters 30-40 apply independently of the requirements in the FFA. DOE reserves its rights to maintain that the closure/post-closure/corrective action requirements in KRS 224 Subchapter 46 and 401 KAR Chapters 30-40 do not apply independently of the requirements in the FFA. Further, the Cabinet specifically reserves its rights to pursue administrative and/or judicial enforcement actions, including the right to order all necessary remedial measures, assess civil penalties for violations pursuant to KRS 224.99-010 and recover all incurred response costs as defined pursuant to KRS 224.01-400 against DOE's contractors (i.e. Martin Marietta Corporation, Lockheed Martin Corporation, Martin Marietta Energy Systems, Lockheed Martin Energy Systems and Bechtel Jacobs) for any violations relating to their operation of the PGDP, including the violations outlined in this Agreed Order. The Cabinet also specifically reserves its rights

to pursue administrative and/or judicial enforcement actions, including the right to order all necessary remedial measures, assess civil penalties for violations pursuant to KRS 224.99-010 and recover all incurred response costs as defined pursuant to KRS 224.01-400 against USEC, Inc. and its contractors Martin Marietta Utility Services and Lockheed Martin Utility Services for any violations relating to their activities at the PGDP, including the violations outlined in this Agreed Order. This Agreed Order is not intended, and nothing in this Agreed Order shall be construed, to release or limit the liability of any other person other than DOE, its past or present officers, directors, officials, or employees, for any violations of state or federal law, including the violations outlined in this Agreed Order.

145. DOE waives its rights to any hearing on the matters addressed herein, except where expressly provided for in this Agreed Order. DOE expressly reserves its right to administrative and judicial review of final determinations of the Cabinet relating to this Agreed Order in accordance with applicable law. It is the Cabinet's position that DOE must exhaust its administrative remedies before the Cabinet prior to seeking judicial review of any final determinations by the Cabinet. Failure by DOE to comply with the terms of this Agreed Order shall be grounds for the Cabinet to seek enforcement of this Agreed Order in accordance with applicable law and to pursue any other administrative or judicial action under KRS Chapter 224 that it deems appropriate and DOE reserves its rights and defenses thereto. Provided, however, that prior to seeking administrative or judicial review or seeking enforcement of this Agreed Order, the parties shall comply with paragraphs 118-126 (through the Cabinet's issuance of its final determination to DOE).

146. Each separate provision, condition or duty contained in this Agreed Order may be the basis for an enforcement action for a separate violation and penalty pursuant to KRS Chapter 224, upon the failure to comply with such provision, condition, or duty of this Agreed Order.

147. Except as otherwise provided herein, this Agreed Order or any of its provisions, conditions or dates contained herein may be amended, modified or deleted only upon a written request stating the reasons therefore, and by the approval and written Order of the Secretary or his designee. Any such amendment, modification, deletion, or extension shall not affect any other provision, condition or date within the Agreed Order unless specifically and expressly so provided by the written Order.

148. Upon receipt of a written request, the Cabinet will grant DOE an extension of time reasonably needed for DOE to complete its performance under the terms of this Agreed Order when good cause exists for the requested extension. Good cause exists in the following circumstances: (a) in the event of force majeure; (b) if a delay is caused by the Cabinet's failure to meet a requirement of this Agreed Order; (c) if a delay is caused by a good faith use of the Consultation Process of paragraphs 118-126; (d) a delay caused by the good faith initiation of administrative or judicial action; (e) a delay caused, or which is likely to be caused, by the grant of an extension in regard to another schedule; or (f) any other event or series of events mutually agreed to by DOE and the Cabinet as constituting good cause. Good cause does not exist if a delay is caused by DOE's failure to coordinate its activities with USEC. Such extension request must be made in writing (or made orally, followed within ten (10) days by a written request) and must be tendered prior to the time performance is due and include the length of extension sought, the good

cause for the extension, and any related deadline that would be affected if the extension was granted.

149. For extension requests, the following procedures shall apply: (a) Within twenty-one (21) days of receipt of a written request for an extension of a schedule, the Cabinet shall advise DOE in writing of the Cabinet's position on the request. If the Cabinet fails to respond to DOE's request within the twenty (21) day period, then, beginning on the 22nd day, DOE shall have a day for day extension until such time as the Cabinet either concurs with the extension request or issues a statement of nonconcurrence. If the Cabinet does not concur with the requested extension, it shall provide a written statement of nonconcurrence setting forth the basis for its position. (b) If the Cabinet concurs in the extension request, then the Cabinet shall extend the schedule accordingly. (c) If the Cabinet does not concur in the extension request, the schedule shall not be extended, except as otherwise provided in the consultation process set forth in Section III of this Agreed Order. (d) Within fifteen (15) days of receipt of a statement of the Cabinet's nonconcurrence with the requested extension, DOE may invoke the consultation process set forth in Section III. If DOE does not invoke the consultation process within fifteen (15) days of receipt of a statement of nonconcurrence, then DOE shall be deemed to have accepted the Cabinet's position and the existing schedule. (e) A timely and good faith request for an extension shall suspend any assessment of stipulated penalties or application for enforcement of the affected schedule until a decision is reached on whether the requested extension will be approved. (f) Following the grant of an extension, an assessment of stipulated penalties or an application for enforcement may be sought only to compel compliance with the schedule as most recently extended.

150. The Cabinet does not, by its consent to the entry of this Agreed Order, warrant or aver in any manner that DOE's complete compliance with this Agreed Order will necessarily result in compliance with the provisions of KRS Chapter 224 and the regulations promulgated pursuant thereto.

151 The provisions of this Agreed Order shall apply to and be binding upon DOE. The acts or omissions of its agents and employees shall not excuse DOE's performance of any provision of this Agreed Order. DOE shall give notice of this Agreed Order to any successors in interest prior to the transfer of ownership and/or operation of any part of the now existing facility and shall follow all statutory and regulatory requirements for such a transfer. After such a transfer, DOE shall notify the Cabinet that the required notice was given to any successor in interest prior to the transfer of ownership and/or operation. Regardless of whether or not any transfer takes place, DOE shall remain fully responsible for the performance of all Remedial Measures to the extent consistent with applicable law.

152 The Cabinet and the DOE acknowledge and agree that the terms and conditions of this Agreed Order are facility-specific and are designed specifically for the unique characteristics of this facility and the factual circumstances of this enforcement case. This Agreed Order is therefore expressly inapplicable to any other site or facility in the Commonwealth of Kentucky.

153. DOE enters into this Agreed Order, without admission of any alleged violation or issue of fact or law, in order to expeditiously resolve disputed matters and to avoid delays and costs associated with litigation. DOE reserves all rights and defenses to

administrative and judicial review of actions of the Cabinet taken pursuant to this Agreed Order.

154. This Agreed Order shall be of no force and effect unless and until it is entered by the Secretary of the Cabinet or his designee as evidenced by his signature thereon.

155. The Cabinet has determined that, with respect to violations and potential violations addressed herein, DOE, by entering into this Agreed Order, has either corrected or is in the process of correcting all alleged violations of laws, rules, or regulations pertaining to environmental protection to the satisfaction of the Commonwealth of Kentucky within the meaning of KRS 224.40-330(3).

156. The parties recognize the value of the C-746-U landfill to ongoing DOE operations, including its value as a disposal facility for cleanup wastes meeting the landfill's waste acceptance criteria (WAC) and derived from response/corrective actions undertaken pursuant to state and federal authorities. The parties will, consistent with applicable requirements, expedite final action on the pending permit modification requests to use the C-746-U landfill to dispose of cleanup wastes, scrap metal, and other materials meeting the C-746-U landfill permit requirements and WAC.

157. The universe of waste that may be accepted at the U-landfill will be determined by the U-landfill permit, as modified, and applicable laws and regulations, and will not be limited to the original information included in DOE's Notice of Intent to Apply, dated December 31, 1992.

158. The parties agree that all environmental sampling at the site will be in accordance with U.S. Environmental Protection Agency's sampling and analysis protocol set forth in SW-846, unless the parties agree otherwise in writing.

159. Nothing in this Agreed Order shall be construed as a waiver of or limitation on DOE's jurisdiction over source, by-product, or special nuclear materials under the Atomic Energy Act of 1954, as amended, 42 U.S.C. Section 2201, et seq.

160. Any submittal or written statement of dispute that, under the terms of this Agreed Order, would be due on a Saturday, Sunday, or holiday shall be due on the following business day.

AGREED TO BY:

Jessie Roberson
United States Department of Energy

9/30/03
Date

HAVE SEEN:

James F. Dickinson
James Dickinson, Hearing Officer

9/29/03
Date

FILE NOS. DWM-31434-042 (includes DWM-00062, DWM-02162, and DWM-02163) DAQ-31740-030 and DOW-26141-042

ORDER

Upon agreement of the parties and being otherwise sufficiently informed, the foregoing AGREED ORDER is hereby executed as a final Order of the Natural Resources and Environmental Protection Cabinet this the 29th day of September 2003,

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET

HENRY C. LIST, SECRETARY

AND THIS AGREED ORDER, HAVING BEEN SIGNED BY BOTH PARTIES, IS ENTERED AS A FINAL ORDER ON THIS THE 2nd DAY OF October 2003.

NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION CABINET

HENRY C. LIST, SECRETARY

CERTIFICATE OF SERVICE

I hereby certify that on the 6th day of October, 2003, a true and accurate copy of the foregoing **AGREED ORDER** was mailed, postage pre-paid, to the following:

Rachel Blumenfeld
Office of Chief Counsel
Department of Energy
P. O. Box 2001
Oak Ridge, TN 37831

And Ray Miskelley
GC-51/Forrestal Building
1000 Independence Avenue, S.W.
Washington, D.C. 20565

and hand-delivered to:

Hon. Randall G. McDowell
Office of Legal Services
Fifth Floor, Capital Plaza Tower
Frankfort, Kentucky 40601

and by messenger mail to:

DWM Enforcement Branch

Sue Stivers
DOCKET COORDINATOR

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